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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,536	01/04/2001	Hiroshi Izumi		2542

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WOOD, PHILLIPS, VAN SANTEN,
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CHICAGO, IL 60661

EXAMINER

BANANKHAH, MAJID A

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/754,536	Applicant(s) IZUMI, HIROSHI	
	Examiner Majid A Banankhah	Art Unit 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application filed on January 04, 2001. Claims 1-14 are presented for examination.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the background of the invention in view of Wheeler (A Command Interpreter for Ada, hereinafter Wheeler, ACM SIGAda Letters. Volume II Issue 4, January 1984).

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Per claim 13, a computer having a UNIX-based operating system installed therein (background of the invention, pg. 1-2, UNIX OS, and command interpreter). Additionally, as a background it is well known in the art that "*the UNIX operating system organizes files into directories which are stored in a hierarchical tree-type configuration*". Additionally, as well as using the shell to run commands, each of the shell programs in UNIX have a built-in programming language that a user can use to write their own commands or programs. A user can put commands into a file--known as a shell script--and execute the file like a command or program. Shells invoke two types of commands: internal commands (such as set and unset), which are handled by the shell program and external commands (such as ls, grep, sort, and ps), which are invoked as programs. Furthermore, "*in UNIX, The shell program acts as a command interpreter taking each command and passing them to the kernel to be acted upon, and Shells invoke two types of commands: internal commands (such as set and unset) which are handled by the shell program and external commands (such as ls, grep, sort, and ps) which are invoked as programs*".

Background of the invention fails to teach of "wherein a recursively invokable function calling statement and a flow control statement in a procedure-orientated high-level programming language are incorporated as shell external commands stored in a directory of a file system with an active path".

However, Wheeler in the same field of endeavor teaches of the limitations in page 53, PERFORM (THE PROCEDURE PC.VALUE, GIVEN, => IN ACTUAL, ...), and page 56, the paragraph starting with "In this version, the command ...". See how command acquisition is accomplished by the GET procedure call, wherein the mapping is accomplished by a combination of the encoding of the "external command" into a value of the enumeration type by

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the "GET call". Additionally, later in the next paragraph (starting with In the command interpreter...) the command name REPRESENTATION, inputs a character string (STRING) is inputted as the argument of the GET (COMMAND REPRESENTATION). The command interpreter procedure is part of a collection of components which together provide the ability to install and invoke command without rewriting and recompiling the interpreter and prevent rewriting a program when the user is performing an operation with the use of the shell script, he may continue to execute a command described without rewriting and recompiling of the interpreter (see Wheeler, page 58, and specifically, part 4. the conclusion. It would have been obvious for a person ordinary skill in the art at the time the invention was made to use the command interpreter of wheeler for the reason to avoid writing and recompiling command when the user is performing an operation with the use of the shell script.

Per claim 14, a multitasking computer system operative to run a program stored in an accessible file and described in a procedure-oriented high-level programming language having at least one function definition (background of the invention, pg. 1-2, UNIX OS, and command interpreter), the program having a command for executing the program (Page 1 after Description of the prior art to page 2, ln. 22).

Background of the invention fails to teach of "the program performing the step of generating a process for executing an entity of each function defined in the program when the program is executed by the command".

However, the reference of Wheeler teaches of the limitations in page 53, PERFORM (THE PROCEDURE PC.VALUE, GIVEN, => IN ACTUAL, ...), and page 53, and page 56, the

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paragraph starting with "In the command interpreter...". See how each of the functions are provided explicitly by program abstraction. Additionally, later in the next paragraph (starting with In "the command interpreter...") the command name REPRESENTATION, inputs a character string (STRING) is inputted as the argument of the GET (COMMAND REPRESENTATION). The command interpreter procedure is part of a collection of components which together provide the ability to install and invoke command without rewriting and recompiling the interpreter and prevent rewriting a program when the user is performing an operation with the use of the shell script, he may continue to execute a command described without rewriting and recompiling of the interpreter (see Wheeler, page 58, and specifically, part 4. the conclusion. It would have been obvious for a person ordinary skill in the art at the time the invention was made to use the command interpreter of wheeler for the reason to avoid writing and recompiling command when the user is performing an operation with the use of the shell script.

6. Claims 1-12 are allowed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Majid A. Banankhah** whose telephone number is (571) 272-3770. The examiner can normally be reached on Monday – Thursday, 8:00 AM – 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Maid Banankhah

9/26/04


MAID BANANKHAH
PRIMARY EXAMINER